

AMENDMENT

In the Claims:

23. A method, comprising:
forming a first layer of inorganic spin-on glass on a substrate;
depositing a first dielectric on the first layer;
forming a second layer of inorganic spin-on glass on the first dielectric; and
planarizing the second layer of spin-on glass.
24. The method of claim 23 wherein forming the first layer of spin-on glass
comprises depositing a siloxane-based spin-on glass on the substrate.
25. The method of claim 23 wherein forming the first layer of spin-on glass
comprises depositing a polyimide spin-on glass on the substrate.
26. The method of claim 23 wherein forming the first layer of spin-on glass
comprises depositing a polymethylmethacrylate spin-on glass on the substrate.
27. The method of claim 23 wherein forming the first layer of spin-on glass
comprises curing the first layer at 425°C.
28. The method of claim 23, further comprising:
forming a second dielectric on the substrate before forming the first layer of
spin-on glass; and
forming the first layer of spin-on glass on the second dielectric.
29. The method of claim 23, further comprising:
forming a layer of metal on the substrate before forming the first layer of spin-on
glass; and
forming the first layer of spin-on glass on the layer of metal.
30. The method of claim 23, further comprising:

forming a layer of metal on the substrate before forming the first layer of spin-on glass;
depositing a second dielectric on the layer of metal before forming the first layer of spin-on glass; and
forming the first layer of spin-on glass on the second dielectric.

31. The method of claim 23 wherein depositing the first dielectric comprises performing a plasma-enhanced deposition of the first dielectric onto the first layer of spin-on glass.

32. The method of claim 23 wherein depositing the first dielectric comprises depositing an oxide onto the first layer of spin-on glass.

33. The method of claim 23 wherein depositing the first dielectric comprises depositing a low-temperature oxide onto the first layer of spin-on glass.

34. The method of claim 23, further comprising planarizing the first dielectric while planarizing the second layer of spin-on glass.

35. The method of claim 23, further comprising planarizing the first dielectric and the first layer of spin-on glass while planarizing the second layer of spin-on glass.

36. The method of claim 23 wherein planarizing the second layer of spin-on glass comprises etching back the second layer of spin-on glass.

37. The method of claim 23, further comprising:
wherein planarizing the second layer of spin-on glass comprises etching back the second layer of spin-on glass; and
etching back the first dielectric while etching back the second layer of spin-on glass.

38. The method of claim 23, further comprising:
wherein planarizing the second layer of spin-on glass comprises etching back the second layer of spin-on glass; and

etching back the first dielectric and the first layer of spin-on glass while etching back the second layer of spin-on glass.

39. A semiconductor structure, comprising:
a substrate;
a first layer of inorganic spin-on glass disposed on the substrate;
a first dielectric disposed on the first layer; and
a planarized second layer of inorganic spin-on glass disposed on the first dielectric.

40. The semiconductor structure of claim 39 wherein the first layer of spin-on glass comprises a siloxane-based spin-on glass.

41. The semiconductor structure of claim 39 wherein the first layer of spin-on glass comprises a polyimide spin-on glass.

42. The semiconductor structure of claim 39 wherein the first layer of spin-on glass comprises a polymethylmethacrylate spin-on glass.

43. The semiconductor structure of claim 39, further comprising:
a second dielectric disposed on the substrate; and
wherein the first layer of spin-on glass is disposed on the second dielectric.

44. The semiconductor structure of claim 39, further comprising:
a metal layer disposed on the substrate; and
wherein the first layer of spin-on glass is disposed on the metal layer.

45. The semiconductor structure of claim 39, further comprising:
a metal layer disposed on the substrate;
a second dielectric disposed on the metal layer; and
wherein the first layer of spin-on glass is disposed on the second dielectric.

46. The semiconductor structure of claim 39 wherein the first dielectric comprises a low-temperature oxide.

47. The semiconductor structure of claim 39, further comprising a planarized boundary that includes the planarized second layer of spin-on glass and a planarized portion of the first dielectric.

48. The semiconductor structure of claim 39, further comprising a planarized boundary that includes the planarized second layer of spin-on glass, a planarized portion of the first dielectric, and a planarized portion of the first layer of spin-on glass.